



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT

ATTY DOCKET NO.: 5649-1162

DATE: August 28, 2003

**UTILITY PATENT APPLICATION TRANSMITTAL LETTER  
AND FEE TRANSMITTAL FORM (37 CFR § 1.53(b))**

Mail Stop PATENT APPLICATION  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Transmitted herewith for filing under 37 CFR § 1.53(b) is:

- ☒ a patent application  
☐ a Continuation ☐ a Divisional ☐ a Continuation-in-Part (CIP) Application of prior application no.: \_\_\_\_\_; filed \_\_\_\_\_, the disclosure of which is incorporated herein by reference in its entirety.  
☐ and claims the benefit of Provisional Application No. \_\_\_\_\_; filed \_\_\_\_\_.

Inventor(s) or Application Identifier:

**Sung-Yung Lee**, Republic of Korea  
**Nak-Won Jang**, Republic of Korea  
**Heung-Jin Joo**, Republic of Korea

Entitled: **SEMICONDUCTOR DEVICES HAVING CAPACITORS OF METAL-INSULATOR-METAL STRUCTURE WITH COEXTENSIVE OXIDATION BARRIER PATTERN AND LOWER ELECTRODE BOTTOM AND METHODS OF FORMING THE SAME**

Myers Bigel Sibley & Sajovec, P.A.  
P. O. Box 37428  
Raleigh, North Carolina 27627  
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Facsimile: (919) 854-1401  
Customer No. 20792

Enclosed are:

1. ☒ Application Transmittal Letter and Fee Transmittal Form (*A duplicate is enclosed for fee processing*)
2. ☒ 19 pages of Specification (including 35 claims)
3. ☒ 5 sheets of Formal Drawings (35 USC 113)
4. ☒ Oath or Declaration
  - a. ☒ newly executed (*original or copy*)
  - b. ☐ copy from prior application (37 CFR 1.63(d) (*for continuation/divisional*) [Note Box 6 Below])
  - c. ☐ DELETION OF INVENTOR(S) (*Signed statement deleting inventor(s) named in the prior application*)
5. ☐ Application Data Sheet. See 37 CFR 1.76
6. ☐ Incorporation By Reference (*useable if box 4b is checked*)

The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.

7. ☐ Microfiche Computer Program (*Appendix*)
8. ☒ Assignment papers (*cover sheet(s) and document(s)*)
9. ☐ Applicant claims small entity status. See 37 CFR § 1.27.
10. ☐ Information Disclosure Statement, PTO-1449, and \_\_\_\_\_ references cited
11. ☐ Preliminary Amendment (*Please enter all claim amendments prior to calculating the filing fee.*)
12. ☐ English Translation Document
13. ☒ Certified Copy of Korean Application No. 2002-66520; Filed October 30, 2002
14. ☐ Sequence Listing/ Sequence Listing Diskette
  - a. ☐ computer readable copy
  - b. ☐ paper copy
  - c. ☐ statement in support
15. ☐ An Associate Power of Attorney
16. ☒ Return Receipt Postcard (MPEP 503) (*Should be specifically itemized*)
17. ☐ Other:

The fee has been calculated as shown below:

	Column 1 No. Filed	Column 2 No. Extra	Small Entity Rate      Fee	Large Entity Rate      Fee
BASIC FEE			\$375.00	\$ 750.00
TOTAL CLAIMS	35 - 20 =	15	x 09 = \$	x 18 = \$ 270.00
INDEP CLAIMS	5 - 3 =	2	x 42 = \$	x 84 = \$ 168.00
<input type="checkbox"/> MULTIPLE Dependent Claims Presented			+ 140 = \$	+ 280 = \$
<i>If the difference in Col. 1 is less than zero, Enter "0" in Col. 2</i>			Total \$	Total \$1188.00

- ☐ A check in the amount of \$ \_\_\_\_\_ to cover the filing fee is enclosed.
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- ☒ The Commissioner is hereby authorized to credit overpayments or charge the following fees associated with this communication to Deposit Account No. 50-0220:
- a. ☒ Additional filing fees under 37 CFR 1.16 for presentation of extra claims.
  - b. ☒ Additional patent application processing fees under 37 CFR 1.17.

Respectfully submitted,



Julie H. Richardson

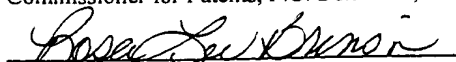
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MS Patent Application

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

JNR/r/b

Date: 8-28-03

Doc. No. 5249-1162

Serial No. TBA

Inventor: Lee et al.

09-08-03 A06:41 IN

Sir: Kindly acknowledge receipt of the accompanying items listed below by placing your receiving stamp hereon and return mailing:

✓ Application Transmittal and:

✓ Specification pages 19

✓ No. of Claims 35

✓ Declaration & POA

✓ Assignment and Fee

✓ Small Entity Statement

✓ Formal Drawings 5 sheets

Associate Power of Attorney

✓ Exp. Mail 1st Class Mail

✓ Other:

✓ Check \$ 1228 00

IDS & PTO-1449 & refs.

Amendment & Amend. Transmittal

Preliminary Amendment

Issue Fee

Brief

Appeal

✓ Submittal of Priority Doc.

Korean

2002-06520  
22141 U.S. PTO

10/650344

Return Post Card

Respectfully submitted,  
MYERS BIGEL SIBLEY & SAJOVEC, P.A.  
Attorneys for Applicant

08/29/03



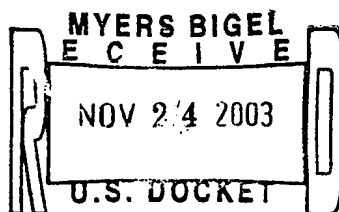
## UNITED STATES PATENT AND TRADEMARK OFFICE

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APPL NO.	FILING OR 371 (c) DATE	UNIT	FIL REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/650,344	08/29/2003	2811	1188	5649-1162	5	35	5

8/28/2003

Julie H. Richardson, Esq.  
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CONFIRMATION NO. 6659

## FILING RECEIPT



\*OC000000011324419\*

Date Mailed: 11/20/2003

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

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Nak-Won Jang, Seoul, KOREA, REPUBLIC OF;  
Heung-Jin Joo, Gyeonggi-do, KOREA, REPUBLIC OF;

## Domestic Priority data as claimed by applicant

## Foreign Applications

REPUBLIC OF KOREA 2002-66520 10/30/2002

If Required, Foreign Filing License Granted: 11/20/2003

Projected Publication Date: 05/06/2004

Non-Publication Request: No

Early Publication Request: No

11-24-03 A09:56 IN

## Title

Semiconductor devices having capacitors of metal-insulator-metal structure with coextensive oxidation barrier pattern and lower electrode bottom and methods of forming the same

## Preliminary Class

257

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Title 37, Code of Federal Regulations, 5.11 & 5.15**

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